

03-01-04

PATENT
00798DIVCIP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit: Not Yet Assigned :
Examiner: Not Yet Assigned :
In re Application of : STABILIZATION OF TRANSITION METAL
Matyjaszewski et al. : COMPLEXES FOR CATALYSIS IN
: DIVERSE ENVIRONMENTS
Serial No.: 10/684,137 :
Filed: October 10, 2003 :

INFORMATION DISCLOSURE STATEMENT

Pittsburgh, Pennsylvania
February 27, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants, in accordance with the duty of disclosure pursuant to 37 C.F.R. § 1.56, hereby advise the United States Patent and Trademark Office of the references listed on the accompanying Form PTO/SB/08 *Information Disclosure Statement by Applicant* (substitute for Form 1449A/PTO). A copy of each of the cited references is herewith enclosed.

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Date of Deposit February 27, 2004

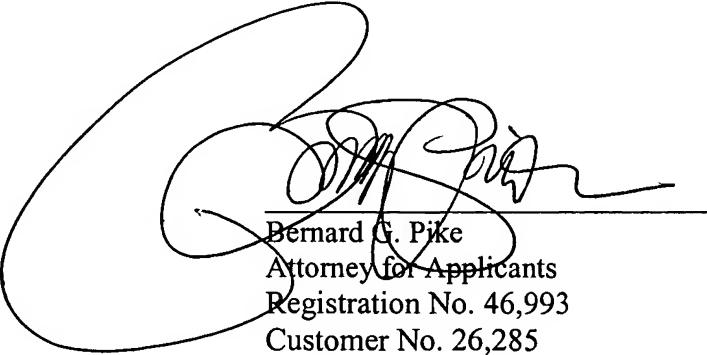
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Applicants note that although the cited references may be relevant to the examination of the above-referenced application, under 37 C.F.R. § 1.97(h), the filing of this *Information Disclosure Statement by Applicant* "shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in § 1.56(b)."

Applicants further note that the filing of this *Information Disclosure Statement by Applicant* is not an admission that the references cited herein constitute prior art under 35 U.S.C. §§ 102-103 with respect to the captioned application.

Pursuant to 37 C.F.R. § 1.97(b)(3), Applicants submit that no fee is necessary for consideration of this *Information Disclosure Statement by Applicant*. Nevertheless, the Commissioner is hereby authorized to charge any additionally required fees deemed necessary for consideration of this *Information Disclosure Statement by Applicant* to Account No. 11-1110.

Respectfully submitted,



Bernard G. Pike
Attorney for Applicants
Registration No. 46,993
Customer No. 26,285

KIRKPATRICK & LOCKHART LLP
Henry W. Oliver Building
535 Smithfield Street
Pittsburgh, Pennsylvania 15222-2312

Telephone: (412) 355-6292
Facsimile: (412) 355-6501
e-mail: bpike@kl.com



PTO/SB/08A (10-01)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 5

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tion Number	10/684,137
ate	October 10, 2003
amed Inventor	Matyjaszewski
er Name	Not Yet Assigned
Docket Number	00798DIVCIP

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		3,183,217	05/11/1965	Serniuk, et al.	
		3,959,225	05/25/1976	Kuntz	
		4,007,165	02/08/1977	MacLeay, et al.	
		4,374,751	02/22/1983	Dudgeon	
		4,728,706	03/01/1988	Farnham, et al.	
		4,940,648	07/10/1990	Geiger	
		4,954,416	09/04/1990	Wright, et al.	
		5,089,135	02/18/1992	Yoneyama, et al.	
		5,169,914	12/08/1992	Kaszas, et al.	
		5,312,871	05/17/1994	Mardare, et al.	
		5,405,913	04/11/1995	Harwood, et al.	
		5,451,647	09/19/1995	Faust, et al.	
		5,470,928	11/28/1995	Harwood, et al.	
		5,510,307	04/23/1996	Narayanan, et al.	
		5,763,548	06/09/1998	Matyjaszewski, et al.	
		5,789,487	08/04/1998	Matyjaszewski, et al.	

FOREIGN PATENT DOCUMENTS

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		5,807,937	09/15/1998	Matyjaszewski, et al.	
		5,910,549	06/08/1999	Matyjaszewski, et al.	
		5,945,491	08/31/1999	Matyjaszewski, et al.	
		6,111,022	08/29/2000	Matyjaszewski, et al.	
		6,121,371	09/19/2000	Matyjaszewski, et al.	
		6,124,411	09/26/2000	Matyjaszewski, et al.	
		6,162,882	12/19/2000	Matyjaszewski, et al.	
		6,288,186	09/11/2001	Matyjaszewski, et al.	
		6,407,187	06/18/2002	Matyjaszewski, et al.	
		6,512,060	01/28/2003	Matyjaszewski, et al.	
		6,538,091	03/25/2003	Matyjaszewski, et al.	
		6,541,580	04/01/2003	Matyjaszewski, et al.	
		6,624,262	09/23/2003	Matyjaszewski, et al.	
		6,624,263	09/23/2003	Matyjaszewski, et al.	
		6,627,314	09/30/2003	Matyjaszewski, et al.	

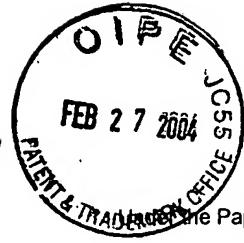
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		United States Patent application No 10/269,556 filed October 11, 2002. Attorney Docket No. 010686		
		United States Patent application No. 09/359,359 filed July 23, 1999. Attorney Docket No. 00169DIV3		
		United States Patent application No. 09/534,827 filed March 23, 2000 Attorney Docket No. 00093		
		United States Patent application No. 09/972,056 filed October 5, 2001. Attorney Docket No. 00819		
		United States Patent application No. 10/034,908 filed December 21, 2001. Attorney Docket No. 001153		
		United States Patent application No. 10/118,519 filed April 6, 2002. Attorney Docket No. 010314		
		United States Patent application No. 10/271,025 filed October 15, 2002. Attorney Docket No. 010687		
		United States Patent application No. 10/289,545 filed November 7, 2002. Attorney Docket No. 00163DIVCON		
		CARTER ET AL., "Polyimide Nanofoams From Phase-Separated Block Copolymers", Electrochemical Society Proceedings, 1997, pp. 32-43, Vol. 97, No. 8, Electrochemical Society, Pennington, NJ, US, ,		
		CHEN ET AL., "Pryolytic Behavior and In-Situ Paramagnetism of Star-like C ₆₀ (CH ₃) _x (PAN)x copolymers", European Polymer Journal, March 1, 1998, pp. 421-429, Vol. 34, No. 3-4, Elsevier Science Ltd., Oxford, GB,		
		DOROTA GRESZTA ET AL., "Gradient Copolymers of Styrene and Acrylonitrile Via Atom Transfer Radical Polymerization", Polymer Preprints, April 1997, pages 709-710, Vol 38(1).		

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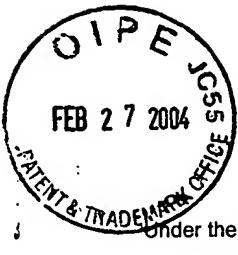
NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
		GROMADA, J.; MATYJASZEWSKI, K. Macromolecules 2001, 34, 7664-7671.		T ²
		JIN-SHAN WANG AND KRZYSZTOF MATYJASZEWSKI, "Controlled/"Living" Radical Polymerization. Atom Transfer Radical Polymerization in the Presence of Transition-Metal Complexes". Reprinted from the Journal of the American Chemical Society, 1995, Vol. 117, No. 20.		
		JIN-SHAN WANG AND KRZYSZTOF MATYJASZEWSKI, "Controlled/"Living" Radical Polymerization. Halogen Atom Transfer Radical Polymerization Promoted by a Cu(I)/Cu(II) Redox Process". Reprinted from Macromolecules, 1995, 28. Department of Chemistry, Carnegie Mellon University. Received May 2, 1995; Revised Manuscript Received August 14, 1995.		
		KRZYSZTOF MATYJASZEWSKI, MINGLI WEI, JIANHUI XIA AND NANCY E. MCDERMOTT, "Controlled/"Living" Radical Polymerization of Styrene and Methyl Methacrylate Catalyzed by Iron Complexes", Macromolecules, Vol. 30, No. 26, 1997.		
		KRZYSZTOF MATYJASZEWSKI, SIMON COCA, SCOTT G. GAYNOR, MINGLI WEI AND BRIAN E. WOODWORTH, "Zerovalent Metals in Controlled/"Living" Radical Polymerization", Macromolecules, 1997, pp. 7348-7350, Vol. 30, No. 23.		
		MATYJASZEWSKI, K.; Editor Controlled/Living Radical Polymerization. Progress in ATRP, NMP, and RAFT. In: ACS Symp. Ser., 2000; 768, 2000., Chapter 19 "Reverse Atom Transfer Radical Polymerization Using AIBN or BPO as Initiator" pp. 263-275		
		MATYJASZEWSKI, K.; XIA, J. Chem. Rev. 2001, 101, 2921-2990.		
		MINGLI WEI, JIANHUI XIA, NANCY E. MCDERMOTT AND KRZYSZTOF MATYJASZEWSKI, "Atom Transfer Radical Polymerization of Styrene in the Presence of Iron Complexes", Polymer Preprints, 38(2), 231 (1997), Department of Chemistry, Carnegie Mellon University.		
		QIU, J.; MATYJASZEWSKI, K; THOUIN, L.; AMATORE, C. MACROMOL. Chem. Phys. 2000, 201, 1625-1631.		
		QUEFFELEC, J.; GAYNOR, S.G.; MATYJASZEWSKI, K. Macromolecules 2000, 33, 8629-8639.		

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		SIMION COCA, CHRISTINA B. JASIECZEK, KATHRYN L. BEERS AND KRZYSZTOF MATYJASZEWSKI, "Polymerization of Acrylates by Atom Transfer Radical Polymerization. Homopolymerization of 2-Hydroxyethyl Acrylate", Journal of Polymer Science, 1998, pp.1417-1424, Vol. 36, Part A: Polymer Chemistry.			
		SEONG MU JO ET AL, "Polyacrylonitrile with Low Polydispersities by Atom Transfer Radical Polymerization", Polymer Preprints, Vol. 38(1) April 1997, pages 697-698			
		SEONG MU JO ET AL, "Effects of Various Copper Salts and Additives on Polymerization of Acrylonitrile by Atom Transfer Radical Polymerization", Polymer Preprints, Vol. 38(1) April 1997, pages 699-700			
		TAKEICHI ET AL., "Preparation of Porous Carbon Films by the Pyrolysis of Poly(Urethane-imide) Films and Their Pore Characteristics", Carbon, February 2001, pp. 257-265, Vol. 39, No. 2,			
		TIMOTHY E. PATTEN AND KRZYSZTOF MATYJASZEWSKI, Atom Transfer Radical Polymerization and the Synthesis of Polymeric Materials, Advanced Materials 1998 10 No. 12, 901-915.			
		T.E. PATTEN ET AL., "Polymers with very Low Polydispersities from Atom Transfer Radical Polymerization", Science, Vol. 272, pp. 866-868, May 10, 1996.			
		U. SCHUBERT ET AL., "Design of Effective Systems for Controlled Radical Polymerization of Styrene: Application of 4,4'-Dimethyl and 5,5'-Dimethyl 2,2'-Bipyridine Copper(ii) Complexes", Macromol. Rapid Commun., Vol. 20, No. 6, pp. 351-355, 1999.			
		WANG ET AL., "Living"/Controlled Radical Polymerization, Transition-Metal-Catalyzed Atom Transfer Radical Polymerization in the Presence of a Conventional Radical Initiator", Macromolecules, 1995, Vol. 28, pp. 7572-7573.			
		WANG, J.-S.; MATYJASZEWSKI, K., J. Am. Chem. Soc. 1995, 117, 5614-5615.			
		XIA J. AND MATYJASZEWSKI K., "Controlled/ "Living" Radical Polymerization. Homogenous Reverse Atom Transfer Radical Polymerization Using AIBN as the Initiator," Macromolecules, 1997, pp. 7692-7696, vol. 30.			

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